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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,225	12/21/2001	A. John Allen	209184US	3301

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ALEXANDRIA, VA 22314

EXAMINER

CLARDY, S

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 10/21/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,225

Applicant(s)

ALLEN ET AL.

Examiner

S. Mark Clardy

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6-26,28,29,59 and 60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2,5,27 and 30-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8. 6) ☐ Other: _____

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Claims 1-60 are pending in this application. The substitute specification has been entered changing the term "Jordanite" to the art accepted term "Yenomite".

Applicant's election with traverse of Group I in Paper No. 10 is acknowledged. The traversal is on the ground(s) that patentable distinction between the groups has not been shown. This is not found persuasive because soil compositions (I) and plants (II) are unrelated classes of inventions, and because the rationale for separating Groups I, III, and IV is deemed valid.

The requirement is still deemed proper and is therefore made FINAL.

Claims 3, 4, 6-26, 28, 29, 59, and 60 have been held withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

Claims 1, 2, 5, 27, and 30-58 have been examined only insofar as they read on the elected species comprising phillipsite containing zeolite, Yenomite.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 2, 5, 27, and 30-58 are rejected under 35 U.S.C. 101 because in claims 1, 2, 5, and 27, the claimed invention is directed to non-statutory subject matter, i.e., a mixture of statutory classes: soil composition and plants. It appears that the invention is not a potted plant, but the potting soil used for growing such plants. In claims 30-58 the claims are drawn to "using an agriculturally or horticulturally effective amount of Yenomite". A "use" is not a statutory class of subject matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 30-58 lack an explicit method step; "using" a material does not constitute a method step.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5 are rejected under 35 U.S.C. 102(a), and (b) as being anticipated by Parham¹.

Parham teaches that natural zeolites such as chabazite, faujasite, and phillipsite (Table 1) are known materials which are useful in a process called zeoponics, a technique for growing plants in a greenhouse on a mixture of zeolites, peat, and vermiculite (p. 109). Applicant's claims as drafted read on these known, naturally occurring zeolites alone (disregarding the non-statutory combination with a plant).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

¹ Parham, Walter. "Natural zeolites". *Natural Resources Forum*. May 1989. p. 107-114.

Claims 1, 2, 5, 27, and 30-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Parham, Dwairi², Virta³, Ming et al (US 5,451,242), and Goto (US 5,106,405).

Parham has been discussed above.

Dwairi teaches that it was known to use zeolites for plant growing media (introduction), and that the zeolitic tuff, such as that from the Jordan-Ariatrain area (2.3), was useful for planting media (3.4).

Virta teaches that zeolites such as chabazite and phillipsite, among others (intro paragraph) are useful in horticultural applications such as soil conditioners and growth media ("Consumption" paragraph, p. 84.1).

Ming et al teach synthetic soil and fertilizer compositions comprising a synthetic apatite, agronutrients and a cationic exchange medium such as zeolite (chabazite or phillipsite) or smectite (col 4, lines 4-25; col 9, lines 19-23, 40-44). The resultant synthetic soil mixture is useful in horticultural applications such as zeoponics and hydroponics (col 12, lines 38-42)

Goto teaches the combination of zeolitic material (col 3, lines 1-15) with other useful potting media components such as pH conditioners such as calcium carbonate (i.e., calcite: col 4, lines 31-36).

One of ordinary skill in the art would be motivated to combine these references because they disclose the desirability of incorporating zeolites into potting soil mixtures.

² Dwairi. English translation of Jordanian patent registration number 1852, dated 7/11/2001.

³ Virta. "Zeolites". U.S. Geological Survey Minerals Yearbook – 1999. p. 84.1-84.3.

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Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have used applicant's zeolite in (or as) a potting soil mixture because the prior art teaches that zeolites, such as those found in the area of Jordan discussed herein, are useful as major components of potting soils, and that other materials such as smectite clays and calcium carbonate may be combined in the potting soils as well. The particular kind of plant grown in the potting media would appear to be irrelevant, absent some showing that it is better for certain classes of plants than others.

No unexpected or unobvious results are noted; no claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 703-308-4550. The examiner can normally be reached on 7:20 - 3:50.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



S. Mark Clardy
Primary Examiner
AU 1616

October 20, 2003